

**REMARKS**

In response to the Office Action dated October 29, 2007, claim 11 has been amended and claims 22-24 have been newly added. Claims 11-24 are now active in this application. No new matter has been added. The amendment and new claims are supported, at a minimum, by pages 15-18 of the specification. Specifically, new claim 22 is supported by the bridging paragraph between pages 17 and 18 of the specification, new claim 23 is supported by the bridging paragraph between pages 15 and 16 of the specification, and new claim 24 is supported by pages 15-18 of the specification.

Claim 11 is objected to for informalities. Applicants submit that this objection has been overcome by the foregoing amendments.

Claims 11-20 were rejected under 35 U.S.C. § 102(e) as allegedly anticipated by U.S. Patent 6,990,583 to Matsayuma et al. (hereinafter Matsayuma). These rejections are respectfully traversed.

Amended claim 11 recites, in pertinent part, “generating, in response to the certificate issuing request by the issuing authority, a public key certificate including the contents signed by the registration authority, the signature to the contents signed by the registration authority, issuing contents to be issued by the issuing authority, and an issuing authority signature to the contents signed by the registration authority, the signature to the contents signed by the registration authority and the issuing contents issued by the issuing authority; and sending the public key certificate from the issuing authority to the registration authority for being registered within the registration authority.” These limitations are described in the specification at page 7, lines 14-24.

As expressly stated in claim 11, the public key certificate includes:

- (1) the contents signed by the registration authority,**
- (2) the signature to the contents signed by the registration authority,**
- (3) issuing contents to be issued by the issuing authority, and**
- (4) an issuing authority signature to the contents signed by the registration authority, the signature to the contents signed by the registration authority.**

Anticipation under 35 U.S.C. § 102 requires that “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.”

*Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ 2d 1051, 1053 (Fed. Cir. 1987). At a minimum, the cited prior art does not disclose (expressly or inherently) the above recited limitations.

Regarding the four distinct elements of the certificate contents, express claim limitations can not be ignored under the rubric of “interpreting claim language in its broadest and reasonable” manner, as asserted by page 3 of the Office Action. Every express claim limitation must be disclosed in the cited art.

The Office Action asserts that Matsuyama discloses the above limitations at FIG 16A and lines 24-39 of column 20 and lines 47-56 of column 21. However, Matsuyama, at lines 24-39 of column 20, states merely:

In response to the certificate issuing request from the root registration authority 1601, the public-key-certificate issuer authority 1602 generates the public key certificate. This is a public key certificate in accordance with the formats in FIGS. 6 and 7. The public-key-certificate issuer authority 1602 stores the generated public key certificate in the database for management (see FIG. 5). Also, by signing the public key certificate of the root registration authority 1601 which is issued by the public-key-certificate issuer authority 1602, namely, IA<<RootRA>> by using the private key KsIA of the public-key-certificate issuer authority 1602, and encrypting it using the session key Ks generated in the previous cross certification, the public-key-certificate issuer authority 1602 generates the data E<sub>Ks</sub>({IA<<RootRA>>}<sub>sigKsIA</sub>), and transmits the generated data to the root registration authority 1601.

Additionally, Matsuyama, at lines 47-56 of column 21, states merely:

The public-key-certificate issuer authority 1602 also uses the private key KsIA of the public-key-certificate issuer authority 1602 to sign the public key certificate of the registration authority 1701, namely, IA<<SP>>, which is issued by the public-key-certificate issuer authority 1602, generates the data E<sub>Ks</sub>({IA<<SP>>}<sub>SigKsIA</sub>) by performing encryption using the session key Ks2 generated in the cross certification processing, and transmits the generated data to the root registration authority 1601.

Therefore, Matsuyama does not teach or suggest, “a public key certificate including the contents signed by the registration authority, the signature to the contents signed by the registration authority, issuing contents to be issued by the issuing authority, and an issuing authority signature to the contents signed by the registration authority,” as recited by claim 11.

Thus, Applicant submits that independent claim 11 is not anticipated by Matsuyama.

Under Federal Circuit guidelines, a dependent claim is allowable if the independent claim upon which it depends is allowable because all the limitations of the independent claim are contained in the dependent claims, *Hartness International Inc. v. Simplimatic Engineering Co.*, 819 F.2d at 1100, 1108 (Fed. Cir. 1987). Accordingly, as independent claim 11 is allowable for the reasons set forth above, it is respectfully submitted that all claims dependent thereon are also patentable.

Thus, it is respectfully submitted that dependent claims 12-20, 22, and 23 are also allowable for at least the same reasons as independent claim 11.

Additionally, dependent claim 22 recites, “wherein the public key certificate having been generated includes **its own valid term**, and wherein the registration authority is arranged to **delete information on the public key certificate if the valid term has been ended.**” In other words each public key certificate has its own valid term, and information on the public key certificate is deleted after the valid term has expires or ends.

Also, dependent claims 23 recites, “wherein the registration authority is arranged to **delete information on the public key certificate in response to a public key certificate invalidation request** sent from the issuing authority.” In other words, the information authority is arranged to issue a public key certificate invalidation request which will cause the registration authority to delete information on the public key certificate.

Applicants submit that the cited art does not teach or suggest the limitations of new dependent claims 22 and 23. Thus, claims 22 and 23 are allowable for these reasons, in addition to the same reasons as independent claim 11.

Independent claim 21 recites, in pertinent part, “generating, in response to the certificate issuing request, a public key certificate including: (B-1) the contents signed by the registration authority; (B-2) the signature to the contents signed by the registration authority; (B-3) issuing contents to be issued by the issuing authority and (B-4) an issuing authority signature to the contents signed by the registration authority, the signature to the contents signed by the registration authority and the issuing contents issued by the issuing authority, the public key certificate being sent to the registration authority and registered within the registration authority.”

Thus, Applicant respectfully submits that independent claim 21 is not anticipated by Matsuyama for reasons similar to independent claim 11.

New independent claim 24 recites, in part, “**deleting information, at the registration authority**, on the public key certificate having been generated if the valid term has been ended; and **deleting information, at the registration authority**, on the public key certificate having been generated in response to a public key certificate invalidation request sent from the issuing authority.”

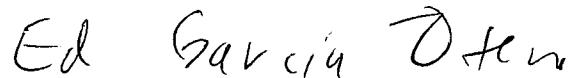
Applicants submit that the cited art does not teach or suggest the above limitations of independent claim 24. Thus, Applicants submit that claim 24 is allowable over the cited art.

Accordingly, it is urged that the application, as now amended, is in condition for allowance, an indication of which is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, Examiner is requested to call the undersigned attorney at the telephone number shown below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP



Eduardo Garcia-Otero  
Registration No. 56,609

600 13<sup>th</sup> Street, N.W.  
Washington, DC 20005-3096  
Phone: 202.756.8000 KEG/EG:cac  
Facsimile: 202.756.8087  
**Date: January 14, 2008**

**Please recognize our Customer No. 20277  
as our correspondence address.**